

Thermal chamber for material testing

Savelieva T., Sachenkov O., Gilmanshin I., Zakirnichnaya M., Azimov Y., Kashapov N.,
Gilmanshina S., Galeeva A., Krainova D.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Published under licence by IOP Publishing Ltd. The problem of ensuring the correct conduct of the experiment with preservation of the required temperature is considered. The construction of the device is proposed that will allow satisfying the conditions for carrying out tensile tests with an increased or lowered sample temperature.

<http://dx.doi.org/10.1088/1757-899X/412/1/012068>

References

- [1] Methods of testing polymeric materials [electronic resource] <http://komef.ru/metodispolimer.pdf>. - ref-separator -
- [2] Universal testing machine UT-110M-100 [electronic resource] <https://test-systems.ru/produkcija/universalny-ispytatelnye-mashiny/110m/uts-110m-100-1u>. - ref-separator -
- [3] Perepechko I I 1977 Properties of polymers at low temperatures (M.: Khimiya) 272
- [4] Zaitsev N L, Yu Googe S, Waisman L A and Gindin V A 1987 Method for testing a sample for strength at low temperatures Patent SU 1538095
- [5] Gindin I A, Kravchenko S F, Lebedev V P and Starodubov Ya D 1970 Testing machine Patent SU 410286
- [6] Deev Yu P, Dyadkin V P, Lebedev Yu P and Semenov L V 1985 Thermocryometer chamber for statistical testing of materials Patent SU 1317253
- [7] Ermolaev O N and Krapotin V N 1975 Cryocamera to the test machine Patent SU 523328
- [8] Dunich E A and Dunich O E 1969 A device for determining the mechanical properties of materials at low temperatures Patent SU 314107
- [9] Pivovarov N K and Zdvizhkov V P 1974 Cryocamera to test machines Patent SU 513296